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GUIDE TO ENTRY SYSTEMS SERVICE INFORMATION KITS

EK–276AE–MI–005

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Place this guide at the front of each volume in the service information kits.

This guide describes the manuals in Digital's service information kits and tells you how to:

- Order the kits.
- Order individual manuals, binders, and spine sets.
- Use the manuals.

This guide also provides a toll-free Customer Services hot line number to call for additional information.

Contents of the Service Information Kits

Each kit contains system manuals, enclosure and expander manuals, and an options manual:

- A *system* manual for each of Digital's standard CPUs. It describes the CPU/memory subsystem, configuration rules, supported options, diagnostic firmware, and troubleshooting procedures.
- An *enclosure* manual for each of Digital's standard system enclosures. It describes the subassemblies within the enclosure, installation and configuration information, and removal and replacement procedures for the major field replaceable units (FRUs).
- An *expander* manual for each of Digital's standard system expanders. An expander maintenance manual contains installation, operation, and configuration information. An expander installation manual contains installation procedures only, with references to the appropriate enclosure manual for additional configuration information.
- A catalog-style *options* manual. It contains a brief description of the option, power requirements, CSR address and interrupt vector settings, and a list of supported operating systems for each Digital module and

mass storage option. The options manual does not include devices that are external to the system enclosure, such as printers and terminals.

The following tables contain titles, descriptions, and order numbers.

Table 1—manuals in an Entry Systems kit
Table 2—order numbers for spine set and binder
Table 3—order numbers and contents of Entry Systems kits

Table 1: Manuals in an Entry Systems Service Information Kit

Title	Order Number[1]
Volume 1A	
KA630 CPU System Maintenance	EK–178A#–MG
KA640 CPU System Maintenance	EK–179A#–MG
KA650 CPU System Maintenance	EK–180A#–MG
MicroVAX Special Systems Maintenance	EK–181A#–MG
Volume 1B	
KA655 CPU System Maintenance	EK–306A#–MG
KA670 CPU System Maintenance	EK–347A#–MG
KN210 CPU Module Set System Maintenance	EK–329A#–MG
Volume 2A	
BA23 Enclosure Maintenance	EK–186A#–MG
BA123 Enclosure Maintenance	EK–188A#–MG
BA213 Enclosure Maintenance	EK–189A#–MG
BA214 Enclosure Maintenance	EK–190A#–MG
BA215 Enclosure Maintenance	EK–191A#–MG
H9642–J Cabinet Maintenance	EK–187A#–MG
H9644 Cabinet Maintenance	EK–221A#–MG
Volume 2B	
BA440 Enclosure Maintenance	EK–348A#–MG

[1]# = current revision, which is always shipped.

Table 1 (Cont.): Manuals in an Entry Systems Service Information Kit

Title	Order Number[1]
Volume 3	
B213A Expander Installation	EK–254A#–IN
B213F Expander Installation	EK–310A#–IN
H9644 Expander Installation	EK–312A#–IN
R215F Expander Installation	EK–317A#–IN
R215F Expander Maintenance	EK–271A#–MG
Volume 4	
Microsystems Options	EK–192A#–MG

[1]# = current revision, which is always shipped.

Table 2: Order Numbers for Spine Set and Binder

Description	Order Number[1]
Spine set	EK–216A#–SS
Binder, 5.0 cm (2.0 in)	99–07705–01

[1]# = current revision, which is always shipped.

Table 3: Kit Contents, Entry Systems Service Information Kits

Kit	Contents
QZ–K19AA–C3	Manuals listed in Table 1, MDM diagnostics on RX50 diskettes, loopback connectors, MDM User's Guide
QZ–K19AA–C5	Manuals listed in Table 1, MDM diagnostics on TK50 tape cartridge, loopback connectors, MDM User's Guide
QZ–K19AA–GZ	Manuals listed in Table 1 only

How to Use the Service Information Kits

You typically need three separate manuals: a CPU system manual, an enclosure manual, and the options manual. The manuals are not meant to be used individually; they should be used as a group.

For example, you can find information about a MicroVAX 3500 system, which contains a KA650 CPU and memory subsystem and mass storage options in a BA213 enclosure, in the following manuals.

- *KA650 CPU System Maintenance.* Use this manual for information about the KA650 diagnostic firmware, CPU-specific system configurations, and a list of supported options.
- *BA213 Enclosure Maintenance.* Use this manual for a description of system cabling, enclosure-specific system configuration, a list of FRUs, and removal and replacement procedures for FRUs.
- *B213A Expander Installation.* Use this manual for procedures on how to connect the B213A expander to the BA213 enclosure and reconfigure the existing system.
- *Microsystems Options.* For each option in the system, use this manual to determine operating system and diagnostic support, switch and jumper settings for common configurations, and power and bus load values.

Configuration Information

Since system configuration involves the four major components of the system, all the information is not contained in one manual. You should refer to four manuals for full system configuration information. Using the MicroVAX 3500 example:

1. Refer to the *BA213 Enclosure Maintenance* manual for enclosure-specific configuration information.
    - Backplane capacity
    - Q22-bus grant chain in the backplane
    - Memory capacity (enclosure and CPU dependent)
    - Mass storage capacity
    - Enclosure power limitations
    - Cabling restraints (enclosure and CPU dependent)
    - List of options compatible with the enclosure, with power and bus load values
    - Configuration worksheet
2. Refer to the *B213A Expander Installation* manual for information on installing the expander.
    - Connecting the B213A expander to the BA213 enclosure

- Reconfiguring the existing system

3. Refer to the *KA650 CPU System Maintenance* manual for CPU-specific configuration information.
   - Cabling restraints (enclosure and CPU dependent)
   - Configuration worksheet for all compatible enclosures
   - CPU/memory and I/O panel cabling
   - List of options supported by the CPU, with power and bus load values
   - Method of determining the CSR address and interrupt vectors
   - Memory capacity (enclosure and CPU dependent)
4. Refer to the *Microsystems Options* manual for option-specific configuration information.
   - CSR and interrupt vector switches
   - Jumper and switch functions

The CPU manuals and enclosure manuals each contain a list of supported options. Those lists are not the same. Some modules supported by a system are not compatible with an enclosure, and vice versa. Cross-reference the two lists to determine if a module is supported by the system.

System-Level Diagnostics

The CPU manuals contain information about ROM-resident firmware, which you can use to diagnose problems with the CPU and memory modules.

MDM and XXDP system-level diagnostics test disk drives, communication devices, and enclosure components. The manuals that describe the MDM and XXDP system-level diagnostic software are included in the MicroVAX Diagnostic Kits, as listed in Table 3. The CPU manuals do not cover MDM and XXDP system-level diagnostic software.

How to Order

You can order the manuals in kits or individually.

To order, customers should use the telephone numbers and addresses listed in Table 4, and Customer Services should use those listed in Table 5.

Customers order through Digital's DECdirect service, and Customer Services personnel order internally. Use the order numbers in Tables 1 through 3.

Table 4: Customer Orders

From	Call	Write
Alaska, Hawaii, and New Hampshire	(603) 884–6660	Digital Equipment Corporation P.O. Box CS2008 Nashua, NH 03061
Rest of USA and Puerto Rico[1]	(800) 344–4825 (toll free)	Digital Equipment Corporation P.O. Box CS2008 Nashua, NH 03061
Canada	(613) 592–5111	Digital Equipment of Canada Ltd. Attn: Direct Order desk 100 Herzberg Road Kanata, Ontario, Canada K2K 2A6

[1]Prepaid orders from Puerto Rico must be placed with Digital's local subsidiary at (809) 754–7575.

Table 5: Customer Services Orders

Internal Orders	Call	Write
Kits and individual binders	DTN 241–3023 (508) 874–3023	Software Supply Business (SSB) Digital Equipment Corporation Westminster, MA 01473
Individual manuals and spine sets	DTN 234–4323 (508) 351–4323	Publishing and Circulation Services (P&CS) NRO3–1/W3 Digital Equipment Corporation Northboro, MA 01532

Additional Support

You can call the following toll-free Customer Services hot line for additional information about system service.

(800) 332–8000
Atlanta Customer Support Center

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